

APPENDIX D

**STORMWATER POLLUTION PREVENTION PLAN
AND
MONITORING PROGRAM AND REPORTING REQUIREMENTS**

**STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
FOR THE
GREGORY CANYON LANDFILL**

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1.0 STORMWATER POLLUTION PREVENTION PLAN **PURPOSE AND OBJECTIVES**

1.1 INTRODUCTION

The State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Industrial Stormwater Permit and the NPDES General Construction Activity Permit require the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) emphasizing stormwater Best Management Practices (BMPs). The purpose of this SWPPP is to establish controls for different sources of pollutants from both industrial and construction activities. Therefore, the NPDES requirements are applicable to the Gregory Canyon Landfill (GCLF) in San Diego County.

The SWPPP has four major objectives:

1. To identify the sources of pollution, including sources of sediment, that affect the quality of stormwater discharges due to both industrial and construction related activities;
2. To identify non-stormwater discharges;
3. To describe, implement and maintain in accordance with a time schedule, BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges caused by construction or industrial activity; and,
4. To implement BMPs to reduce the pollutants in the stormwater discharge upon closure of the landfill site (post-construction BMPs).

1.2 SWPPP REVIEW AND REVISIONS

The permitted owner will amend the SWPPP whenever there is a significant change in construction or operations which may affect the discharge of potential pollutants to surface waters, ground waters or a municipal separate storm sewer system (MS4). The SWPPP may also be modified if the discharger violates any condition of the current General Permit or has not achieved the general objective of reducing or eliminating pollutants in storm water discharges. If the RWQCB determines that the discharger is in violation of the General Permit, the SWPPP shall be amended and implemented in a timely manner, but in no case more than 14-calendar days after

notification by the RWQCB. All amendments should be dated and directly attached to the SWPPP. Local regulatory agencies, with the concurrence of the RWQCB, may require the discharger to amend the SWPPP.

1.3 SWPPP LOCATION AND PUBLIC ACCESS

The SWPPP will be maintained on-site at GCLF's administration office. This document is a report considered available to the public under Section 308(b) of the Clean Water Act.

2.0 INTRODUCTION

2.1 LANDFILL SITE DESCRIPTION

The proposed Class III waste management facility will be located on property currently owned by Gregory Canyon Ltd. (GCL), who will also be named as the permitted operator. Actual day-to-day operations will be conducted by a contract operator.

The proposed GCLF is located in northern San Diego County approximately three miles east of Interstate 15 (I-15) and two miles southwest of the community of Pala (Figure 1). The site is adjacent to SR 76, the San Luis Rey River and lies along the western slope of Gregory Mountain. The GCLF property occupies portions of Sections 4 and 5 of Township 10 South and Sections 32 and 33 of Township 9 South, Range 2 West of USGS 7.5' Pala Quadrangle.

The GCLF will be situated on approximately 1,770 acres of which 308 acres will be used for landfill activities, including a 183-acre refuse area footprint. The 308-acre project area also includes 13 acres for power pole pads approximately 87 acres designated as stockpile and borrow areas. Figure 2 presents the overall layout of the proposed project area including the refuse footprint, stockpile/borrow areas and ancillary facilities area (see Figure 2A for Site Facilities Plan). The remaining 25 acres will be utilized for the main access roads and bridge, desilting basins, stockpile/borrow area haul road, ancillary facilities area, and other site facilities.

The landfill will be operated utilizing the canyon and area fill method for refuse placement. As a Class III landfill, the GCLF will be authorized to receive only non-hazardous solid wastes and inert wastes (e.g., asphalt or concrete). In addition, green and wood waste will also be accepted, but not processed (i.e., shredded or mulched) on the site.

Tires accepted at the site will be stored in a designated, secured area within the landfill footprint. The storage location will move, as needed, depending on the operational phase of the landfill. Tires will be stored on site in accordance with San Diego County's 1994 Uniform Fire Code, Section 1103.3.6 - Outside Storage of Tires and 14 CCR, Section 17354. Tires will be stored for a maximum of six months

to avoid the collection of standing water, rodents and snakes, and to minimize fire hazards. A portable tire shredder will be brought on site when the allowed volumes of storage are met or at a minimum of once every six months to shred the collected tires. The shredded tires will be landfilled.

Large bulky wastes may also include demolition debris which may be crushed or ground down and used on-site for winter deck construction.

REGULATORY REQUIREMENTS

The GCLF will operate under several permits designed to protect the waters of the State including Waste Discharge Requirements (WDR) and National Pollutant Discharge Elimination System (NPDES). These permits are either issued by or administered by the San Diego Regional Water Quality Control Board (RWQCB).

The purpose of this report is to present the stormwater pollution prevention and monitoring program specific to the GCLF. The NPDES program will be implemented through statewide general permits. To obtain authorization for industrial stormwater discharge, the landfill must comply with a General Permit to Discharge Stormwater Associated with Industrial and Construction Activities. The operator has submitted a Notice of Intent (NOI) to comply with the NPDES Construction Activities General Permit and will submit an NOI for industrial activities with the application to obtain WDRs.

In addition, the GCLF's operation must also conform to the conditions set forth in a Solid Waste Facility Permit (SWFP). The SWFP lists the conditions of operation and closure of the proposed project with which the facility is subject to comply. The SWFP will be issued by the County of San Diego, Department of Environmental Health Services acting as the enforcement agency (EA) with concurrence by the California Integrated Waste Management Board (CIWMB).

In addition to these permits, several other permits and approvals will be required for the construction and operation of the GCLF. Section B.2 of the Joint Technical Document (JTD), which was prepared in support of obtaining the WDR's and SWFP, includes information on these permits, other permits and approvals.

2.2 FACILITY DRAINAGE

The primary function of the surface water drainage control system will be to divert and convey stormwater flows in a controlled manner, to minimize erosion, and to inhibit the potential infiltration of surface water run-on or precipitation into the refuse disposal areas. The drainage control system for the GCLF will consist of perimeter drainage channels, buried perimeter drainage pipes, drainage berms, downdrains, energy dissipaters, and desilting basins. The proposed surface water drainage control system for the GCLF will be designed to accommodate a 100-year, 24-hour storm event. The proposed final drainage/erosion control system for the GCLF is shown on Figure 3.

PROPOSED SYSTEM

On-site Drainage Features

On-site drainage features will be designed to control/divert stormwater run-on from surrounding areas and those portions of the landfill which are or will be undisturbed for some time and run-off from the disturbed/developed areas of the landfill including the ancillary support facilities. Stormwater on the landfill deck will sheet flow until it is intercepted by berms located along the edges of the deck. The deck berms will direct flows to downdrains. Exterior benches will collect stormwater from the upgradient slope and divert flows to the bench downdrain inlets. The downdrains will be perpendicular to slope contours and located atop, and anchored into, the final landfill surface. Downdrains will be extended up completed side slopes of the landfill as the filling progresses and also accommodate inlets at each bench. The gradient of these downdrains will follow the surface of the refuse slope and will maintain a minimum three percent grade across the benches. The downdrains will outlet into a buried perimeter drainage pipe system which will discharge into the desilting basins. The desilting basins will reduce the amount of silt ultimately discharged from the landfill site. As discussed above, stormwater run-on from the surrounding areas and those undisturbed portions of the refuse footprint will be directed into the open perimeter storm drain (PSD) channels. The PSD system will discharge downstream of the desilting basins eventually flowing into the San Luis Rey River. Energy dissipaters will be utilized to match pre-developed discharge velocities.

The desilting basins will be designed to conform to regulatory standards minimizing the transport of silt off-site. The run-off from the undisturbed areas of the landfill, run-on from the adjacent properties as well as run-off from those areas within the refuse footprint, which have been re-vegetated to 70% of native condition, will be conveyed to the perimeter drainage channels. The perimeter drainage channels will discharge downstream of the desilting basins directly to natural drainage courses. At a minimum, the basins will be able to accommodate the estimated annual soil loss equivalent to a maximum disturbed area of 75 acres throughout the landfill's site life. One of the proposed BMPs is the establishment of native vegetation on intermediate or final fill areas of the landfill.

The desilting basins are intended to control the amount of silt ultimately discharged from the disturbed portions of the landfill site as well as the rate of discharge. The easterly desilting basin will outflow directly into the San Luis Rey River. The westerly desilting basin will also outlet to the river unless the First San Diego Aqueduct easement is relocated further west. If the pipelines are moved west, then the westerly desilting basin will discharge to a pipe located at the access road crossing. This measure will reduce the number of structures crossing the aqueduct easement. Maintenance crews will clean out the basins annually and use the collected silt as daily cover.

The proposed PSD system will consist of a reinforced concrete trapezoidal drainage channels placed around the landfill footprint perimeter. A portion of the eastern channel will be constructed during the initial construction phase to accommodate flows from the upper eastern slopes of the canyon. Construction of the final western perimeter channel will begin during the Phase II excavation. The remainder of the PSD channels will be completed as the landfill is developed moving up canyon. The PSD is intended to control run-on (from surfaces adjacent to the landfill) that might otherwise flow onto the landfill as well as serving as a conveyance for the undisturbed areas within the refuse footprint downstream of the desilting basins. All collected stormwater flows from the PSD will be discharged downstream of the desilting basins. The western perimeter trapezoidal channel crosses the existing First San Diego Aqueduct easement as it flows to its discharge point. At this location, the perimeter channel will have a cutoff barrier on the upstream and downstream side of the crossing to prevent water from undermining the aqueduct. The crossing will be reinforced with extra concrete and steel.

Interim Drainage Control

Interim drainage control features will consist of compacted earth berms constructed around the perimeter of the deck and the working face area, to divert water around the refuse fill and into the downdrains and buried perimeter drainage pipes. Silt fences and sand bags may also be used to dissipate energy and remove silt upstream of the basins.

Borrow/Stockpile Area Drainage Features

Proper drainage control will be maintained in the borrow/stockpile areas. Surface water control features will include grading of the flatter deck areas to promote lateral runoff of precipitation into such proposed drainage control facilities as downdrains and bench drains on the slopes. Surface waters will be conveyed from the borrow/stockpile areas and discharged into the existing natural drainage courses. Erosion control measures such as vegetation, desilting basins, sand bags, straw matting and/or rip-rap will be utilized to reduce downstream siltation potential. Discharge rates will be equal to or less than natural flow conditions.

Borrow/Stockpile Area B will drain to the southwest into a natural drain course. The drainage course for Borrow/Stockpile Area A runs northwesterly. The drainage control facilities will direct the surface runoff into the existing streams. At the west end of the Borrow/Stockpile Area B, a desilting basin will be constructed to minimize the flow of silt from the borrow/stockpile area. These desilting basins will be designed to accommodate the soil loss from the borrow/stockpile areas. Interim drainage and erosion control features (e.g., silt fences) will be constructed for all borrow/stockpile areas, as necessary. The pre-developed drainage condition of the area will be maintained as closely as possible once operations are discontinued in each of the borrow/stockpile areas. Construction and operation of all drainage facilities, including the borrow/stockpile areas, will be conducted in accordance to the BMPs, developed as part of this SWPPP. The SWPPP is required to comply with State and Federal regulations under the NPDES program. The NPDES permit encompasses all federal guidelines regarding the discharge of stormwater. Implementation of the SWPPP and BMPs will prevent contamination of surface waters surrounding the GCLF. In addition, as a further precaution, surface water flows created during storm events will be monitored at two locations on-site.

Off-Site Drainage

Off-site drainage features are intended to control stormwater that would flow onto the landfill site unless diverted around the landfill perimeter. Any flows from adjacent properties will be contained in the perimeter drainage channel.

Refuse Area Grading

In addition to the surface water control system features discussed above, the refuse areas will be covered with soil. The soil will be graded to promote lateral run-off of precipitation into the drainage control system. The active face, where waste unloading operations are conducted, will be kept as small as practical and surface water flows are directed around this area using earthen berms and grading features. These measures further minimize surface water contact with waste.

Ancillary Facilities Area – Drainage Control

Stormwater run-on will be diverted around the ancillary facilities area. Precipitation onto the exposed paved areas of the ancillary facilities area will shut flow to a low point at the northwest corner. Dry BMPs will be implemented to prevent stormwater degradation. The BMPs are discussed in Section 2.3.

2.3 EROSION AND SEDIMENT CONTROL METHODS

Site operations will rely heavily on erosion control improvements to minimize transport of sediment offsite. By analyzing existing topographical and design maps, the areas most prone to erosion will be identified. Best Management Practices (BMPs) will be implemented to control and minimize transport of sediment offsite. In addition, BMPs will investigate BMPs utilizing the Best Available Technologies that are an economically achievable approach. The BMPs will focus on erosion control measures and drainage control systems as discussed below. Applying these practices will protect the soil surface and prevent soil particles from being detached by rainfall or wind. As a secondary means of controlling sediment transport, desilting basins are also proposed.

The natural geologic conditions at the site will act as a type of BMP. For example, the exposed slope faces in the excavation areas will be largely hard rock material

that in some instances may require blasting. This type of material is not erosive and stormwater run-off from these areas will carry little if any sediment.

For those areas disturbed and consisting of alluvial material, sediment transport from the landfill cover will be greatly reduced by the use of the BMPs discussed below and also by the use of alternative daily cover.

To maintain the integrity and effectiveness of the BMPs, inspection and maintenance protocols will be implemented. Inspection of the BMPs will be conducted and documented on a regular basis and maintenance repairs will be performed based on these routine inspections and on an as-needed basis.

As discussed above, down drains are proposed as part of the site's drainage and erosion control system and constitute common BMPs utilized to intercept surface water from the deck area and slope areas to facilitate rapid removal of run-off from the landfill. The down drains will reduce the run-off concentrations on unprotected areas of the waste prism, thereby minimizing erosion. The down drains are proposed at an average of 600-foot intervals to intercept run-off flows from the deck and benches before their flow velocities become erosive.

To further reduce silt loading, only stormwater flows from disturbed erodable areas within the refuse footprint will be allowed to discharge into the basins. To accomplish this objective, the proposed surface water control system includes the addition of a separate buried pipe system installed along the perimeter of the refuse footprint, which would redirect run-off from disturbed areas and into the debris basins.

All run-on from surrounding areas and the undisturbed areas of the site would be captured by the perimeter drainage channels and discharge directly into the natural drain course downstream of the landfill. These stormwater flows would be discharged utilizing energy dissipaters to match pre-development velocities and run-off peaks. Figure 4 of the JTD presents a layout of the proposed drainage control system and location of typical BMPs, as discussed below, which would be implemented for the initial phase of disposal operations.

In addition to the drainage control system, the site will be operated with a combination of BMPs including erosion control mats, mulching, and hydroseed to

promote the establishment of a vegetative barrier to minimize exposure of soil from the elements.

In addition, coir logs, straw wattle, and straw/hay bale check dams will be installed to reduce flow velocities within the watershed. Figure 4A presents a number of typical details showing these BMPs for the proposed Phase 1 Fill Plan. The erosion control mats and mulching will provide a temporary barrier to intercept energy from rainfall and prevent soil particles from being detached until the native vegetative is established. The erosion control mats will be installed on the slopes and the decks of the landfill.

As discussed above, one of these BMPs will include the establishment of native vegetation on intermediate or final fill areas of the landfill. Once an area reaches a state of 70 percent native vegetation, stormwater flows from that area will be diverted into the perimeter drainage channels, which discharge downstream of the desilting basins directly into the natural drain course.

An additional benefit to the buried perimeter drainage pipe is that this feature can be reactivated during the post-closure maintenance period if routine cover repairs resulted in significant disturbance to the ground surfaces allowing any stormwater to discharge to the basins.

If future events determine the need for additional erosion control measures, this portion of the SWPPP will be revised.

2.4 STABILIZATION

In accordance with the General Permit (Water Quality Order No. 99-08-DWQ) adopted by the SWRCB on August 19, 1999, all disturbed areas of the construction area must be stabilized in order to submit a Notice of Termination (NOT). The NOT terminates coverage under the General Permit and the following criteria will be met:

- All soil disturbing activities are completed.
- A uniform vegetative cover with 70% coverage has been established or;
- Equivalent stabilization measures have been employed including the use of such BMPs as blankets, channel liners, soil cement, fiber matrices, geotextiles, or other erosion resistant soil coverings or treatments.

2.5 DISCHARGE POINTS

As discussed in Section 2.2, the proposed final drainage control system design for the GCLF will have two desilting basins located just east and west of the ancillary facilities to handle the stormwater from the disturbed areas of GCLF prior to discharge off-site. A discharge point will be located at the southwest corner of the ancillary facilities area. Finally, stormwater will also be discharged from the borrow/stockpile areas.

One of these discharge points will be monitored per the SWPPP and Monitoring Program and Reporting Requirements Plan (MPRR) for the GCLF. The proposed discharge points are shown on Figure 3. Sampling will be conducted in compliance with the State's NPDES general permit requirements for stormwater inspection, sampling, observations and reporting. A MPRR which details these activities has been prepared and is included as Appendix A of this SWPPP. The MPRR reports will be submitted to the RWQCB on an annual basis. In addition, the SWPPP will be reviewed annually and appropriate revisions made as necessary.

3.0 MAPS

The figures listed below are an integral part of this SWPPP and included where referenced throughout this report.

Figure 1: Vicinity Map

A map showing the general location of the facility.

Figure 2: Site Map

A topographic/site map showing the detailed physical features of the proposed facility.

Figure 2A: Site Facilities Plan

A map showing the site's ancillary facilities including the entrance facilities, the scales, landfill gas flare station, household hazardous waste storage area, etc.

Figure 3: Final Drainage Plan

An engineering design plan showing the final grading and surface water control system, and the proposed NPDES stormwater discharge and monitoring points.

Figure 4: Phase I Fill Plan and Typical BMP Implementation

An engineering design plan showing the typical location and types of BMPs that can be utilized at the site for the Phase I refuse fill configuration.

Figure 4A: BMP Details and Sections

An engineering design plan showing typical BMP details and sections referenced on Figure 4.

4.0 NARRATIVE DESCRIPTIONS

4.1 INTRODUCTION

As required by NPDES stormwater regulations, a narrative description of the GCLF includes the following:

- Materials treated, stored, disposed, spilled, or leaked in significant quantities;
- Materials, equipment, and vehicle management practices;
- Materials loading, unloading, and access areas;
- Structural and nonstructural control measures;
- Industrial stormwater discharge treatment facilities;
- Methods of on-site storage and disposal of significant materials; and,
- Outdoor storage, manufacturing, and processing activities that generate significant quantities of dust or particulates.

4.2 MATERIALS TREATED, STORED, DISPOSED, SPILLED OR LEAKED IN SIGNIFICANT QUANTITIES

The purpose of this subsection is to describe significant materials that have been treated, stored, disposed, spilled, or leaked in significant quantities in stormwater discharge. 40 CFR Section 122 requires information regarding significant leaks and/or spills at a facility within the previous three years of the application from the state. The GCLF will be a new facility, therefore, no leaks or significant spills have occurred.

4.3 MATERIALS, EQUIPMENT AND VEHICLE MAINTENANCE MANAGEMENT PRACTICES

The purpose of this subsection is to describe materials, equipment, and vehicle management practices which are employed to minimize contact of pollutants with stormwater discharge.

The GCLF will have a variety of heavy equipment stored on-site. All minor service, such as oil changes, lubrication, and fueling, will be handled on-site. Maintenance and

fueling areas will be operated in compliance with all State and County requirements for hazardous material storage and handling.

4.4 MATERIALS LOADING, UNLOADING, AND ACCESS AREAS

The GCLF project will include a paved two to three lane and a bridge will be constructed to cross the San Luis Rey River. After crossing the river, the access road will widen to three travel lanes, curve to the east and lead to the entrance facilities area. Customers will be processed through the entrance facilities (i.e., scales and fee booth) and then directed by landfill personnel to the active unloading area using on-site access roads. The refuse will be unloaded as directed by equipment operators and/or load checkers. The on-site roads leading from the entrance facilities to the unloading area will be paved and/or tightly compacted dirt roads.

4.5 STRUCTURAL AND NONSTRUCTURAL CONTROL MEASURES

Structural control measures consist of stormwater management and sediment and erosion facilities. The proposed structural control measures which reduce the potential for pollutants in stormwater are described in Section 2.0 of this SWPPP.

The proposed nonstructural control measures are described in Section 9.0 of this SWPPP. These control measures consist of the identification of pollution prevention personnel, preventive maintenance practices, good housekeeping practices, employee training, inspections, and spill prevention and response.

4.6 INDUSTRIAL STORMWATER DISCHARGE TREATMENT FACILITIES

Stormwater will not be treated at the GCLF.

4.7 METHODS OF ON-SITE STORAGE AND DISPOSAL OF SIGNIFICANT MATERIALS

The GCLF will be operated as a Class III non-hazardous solid waste facility and acceptance of hazardous wastes will be prohibited. An extensive program will be in place to exclude hazardous waste from entering the site. However, any hazardous materials found at the site will be temporarily stored in a secured, designated hazardous waste storage area. This storage area will be located in the southeast corner of the ancillary facilities area (Figure 2). This area will be specifically designed

for the handling and storage of hazardous wastes, including secondary containment and approved storage containers which are safe and convenient for storing identified wastes.

On-site hazardous waste storage will be limited to 90 days or as required by applicable State laws and regulations prior to being transported to a permitted treatment, storage and disposal facility (TSDF). The "Accumulation Start Date" on the California hazardous waste label of each overpack drum containing hazardous waste will be monitored on a regular basis. Prior to shipment off site, all materials will be overpacked and manifested with a licensed hazardous waste hauler/disposer.

4.8 OUTDOOR STORAGE, MANUFACTURING AND PROCESSING ACTIVITIES, INCLUDING ACTIVITIES THAT GENERATE SIGNIFICANT QUANTITIES OF DUST OR PARTICULATES

The mass excavation of the GCLF refuse area will also require the removal of rock. The rock material will be processed using a crusher and screens. Some of this material will be utilized on-site for cover or as a base for internal haul roads. Surplus materials will be exported off-site to local aggregate producers. This equipment will be used to facilitate processing of the excavated rock. Rock crushing will occur within the southern portion of the landfill footprint or conducted behind a berm which will reduce noise levels to acceptable levels. Dust control operations will be employed to reduce the amount of dust. Water trucks will be used to spray water on soil cover and rock processing areas when conditions exist which may result in the formation of fugitive dust.

5.0 LIST OF POTENTIAL POLLUTANTS THAT MAY BE PRESENT IN STORMWATER

The following is a list of pollutants that may be present in stormwater discharges, in significant quantities, at the GCLF. For example, if the working face of the landfill was uncovered at the time of a significant storm event, the potential for polluted stormwater discharge would be created. The list of pollutants includes, but is not limited to, the following:

- Sediment;
- Trace Petroleum Hydrocarbons (from the paved areas);
- Oil and Grease (O&G) or Total Organic Carbon (TOC);
- pH;
- Total Suspended Solids (TSS);
- Specific Conductance (SC);
- Iron;
- Heavy Metals;
- Petroleum Hydrocarbons;
- Pesticides; and,
- Herbicides.

6.0 FACILITY SIZE AND IMPERVIOUS AREA PERCENT ESTIMATE

The impervious areas of the GCLF include the following:

- Leachate and Subdrain Storage Tanks
- Ancillary Facilities Area
 - Scales/Fee Booths
 - Recyclable goods center
 - Groundwater treatment facility
 - Administration/Visitor Center
 - Maintenance building
 - Household hazardous waste storage area
- Main access and haul roads
- Equipment and storage area

The impervious areas of the proposed landfill were estimated from the Site Plan to cover approximately 13 acres or four percent of the total landfill area (308 acres).

7.0 LIST OF SIGNIFICANT SPILLS OR LEAKS OF TOXIC OR HAZARDOUS POLLUTANTS TO STORMWATER

Since this is a proposed landfill, no significant spills or leaks of toxic or hazardous pollutants to stormwater have occurred.

8.0 SUMMARY OF EXISTING SAMPLING DATA

- An annual report for stormwater dischargers will be prepared and submitted to the RWQCB by July 1 of each year.

9.0 STORMWATER MANAGEMENT CONTROLS AND BEST MANAGEMENT PRACTICES (BMP)

9.1 INTRODUCTION

This section describes the stormwater management controls, BMPs which are appropriate for the GCLF.

9.2 STORMWATER POLLUTION PREVENTION PERSONNEL

The GCL, the owner, will be responsible for ensuring that the SWPPP is implemented, as required, and that it will be revised, as necessary. A list of responsible individuals will be prepared when the proposed landfill project is approved.

9.3 PREVENTIVE MAINTENANCE

Operations will include preventive maintenance practices which provide environmental protection. At a minimum, preventive maintenance involves the periodic inspection and maintenance of facility berms, slope storm drains, other drainage structures, desilting basins, the hazardous waste storage area, and other working areas. The desiltation basins will be cleaned out annually before the rainy season and inspected monthly for excessive debris build-up and/or damage requiring repair. The goal of the inspections shall be to identify conditions which could lead to polluted stormwater discharges and erosion/sediment problems at the GCLF. For a discussion of the periodic site inspection, refer to Section 9.8. In addition, any equipment being used at the facility (e.g., earthmovers and bulldozers) will be properly maintained to reduce the possibility of oil and/or fuel leaks (see Section 9.4.2).

9.4 GOOD HOUSEKEEPING

This subsection describes the good housekeeping practices employed by the facility operating personnel. These practices are designed to maintain, to the greatest extent practicable, a clean and orderly work environment. Well-maintained working areas and equipment storage areas will reduce the possibility of pollutants mixing with stormwater.

9.4.1 OPERATIONAL PRACTICES

The GCLF operating procedures primarily focus on minimizing the possibility of a polluted stormwater discharge. At a minimum, the following non-structural BMPs are implemented:

- A load-checking program will be in effect at the GCLF to check for unauthorized loads and hazardous waste.
- Access roads and perimeter litter fences at the GCLF will be inspected daily for cleanliness. Refuse will be picked up and properly disposed.
- On-site equipment shall be inspected daily for leaks or any conditions which could pollute a stormwater discharge. Improperly functioning equipment will be taken out of service for repair.
- To the greatest extent practicable, the working face of the landfill will be built up in such a way as to reduce polluted stormwater discharge in a storm event period prior to placing the daily cover. The tipping table will be graded to drain away from the working area.
- The operator will maintain a stockpile of cover soil immediately adjacent to the working face at all times to quickly cover the area should a storm event occur.
- The operator will conduct continuous inspections of the integrity of the cover material over the refuse disposal areas. Any defective conditions observed will be repaired promptly.

These operational practices will be discussed periodically during safety meetings and communicated regularly by supervisory personnel to ensure that these practices are understood by all on-site operations personnel concerned. Additional wet weather operating practices may be implemented to supplement the current operating practices at the GCLF.

9.4.2 EQUIPMENT AND MATERIAL STORAGE PRACTICES

Proper equipment and material storage practices will be employed at the GCLF to reduce or eliminate the potential for a polluted stormwater discharge. The following practices will be employed as routine practice:

- Any hazardous materials found in the refuse fill area will be transferred, as soon as practicable, to the hazardous waste storage area.
- The hazardous waste storage area, at a minimum, shall be inspected weekly to check on its structural integrity.

- Any container stored on-site, either temporarily or permanently, shall be stored in accordance with the manufacturers' instructions to avoid damaging the containers from improper weight distribution.
- Where possible, containers will be stored on pallets to prevent rust or corrosion.
- Open containers will be stored in enclosed areas or covered to eliminate the potential for stormwater contact.
- All containers, drums and bags will be stored away from the active disposal areas and direct traffic routes to reduce the possibility for accidental spills.
- Maintenance and fueling areas will be maintained in compliance with all State and County requirements for hazardous material storage and handling.
- Operational equipment stored on-site will be located in an area where the possibility of polluting the stormwater is minimized.
- The exposed paved portions of the ancillary facilities area will be dry swept for soil/sediment removal and laborers will be utilized to pick-up loose litter.
- Equipment maintenance will be conducted under a structure or within a paved, bermed area to contain any spills.
- Spills will be controlled with berms and absorbents.

9.5 SPILL PREVENTION AND RESPONSE

GCL has an Emergency Notification Plan and a Post-Closure Emergency Response Plan (Section E.3 of the JTD). Under the Emergency Notification Plan, the following agencies are notified:

Fire Department	911
Ambulance/Medical	911
Gregory Canyon Ltd.	(415) 391-2833
County of San Diego, Department of Environmental Health, Hazardous Materials Division	(619) 338-2222

If necessary, the following agencies may be notified:

State of California, Office of Emergency Services, Hazardous Materials Unit	(800) 852-7550 or (202) 267-2675
National Response Center - EPA	(800) 424-8802

Although specific emergency response actions will depend of the actual hazard conditions, the general actions undertaken will include the following:

- Removal of unauthorized persons from the spill/leak area.
- Notification of response coordinator by use of radio or pager.
- Immediate response by trained personnel properly equipped with protective devices.
- Mitigation of the hazard.
- Containment and removal of the waste from the area.
- Documentation of the incident.

9.6 STORMWATER MANAGEMENT PRACTICES

Stormwater management practices are those measures in place at the GCLF to control the discharge of stormwater both on and off the site. The GCLF will utilize the following management practices:

- Berms will be constructed around the landfill deck perimeter to intercept stormwater flows and direct them into downdrains, which will convey the flows to buried perimeter drainage pipes.
- Buried perimeter drainage pipes will discharge to the desilting basins.
- Desilting basins will be designed to conform to regulatory standards to minimize the transport of silt off-site.
- Perimeter drainage channels will divert run-on around the landfill.

The on-site surface water drainage control system has been designed to control stormwater that falls on the landfill or the surrounding support area. Any flows from off-site tributary drainage areas will be intercepted by the perimeter drainage channels.

For additional details regarding the stormwater management and BMP features, refer to Sections 2.2 and 2.3. During the excavation activities, the following additional stormwater management measures will be implemented for dust control and prevention of public nuisance.

- The dirt-loaded trucks traveling to the stockpile areas will be watered down by water trucks.
- The access roads, traversed by the dirt trucks within the landfill perimeter, will be watered at regular intervals.

- Water will be used for dust control within the excavation areas and for rock processing/crushing activities.

If future events determine that additional practices are required, this portion of the SWPPP will be revised to include the additional practices.

9.7 EMPLOYEE TRAINING

The goal of stormwater pollution prevention training will be to educate operating personnel of the conceptual objectives of the SWPPP so that they are more capable of responding safely and effectively to any incident which could lead to stormwater pollution.

Stormwater pollution prevention training, both formal and informal, will be provided on an ongoing basis, when it is appropriate and convenient. Training will be conducted as part of the facility's safety meetings, and will include training/workshops offered by the SWRCB, RWQCB or other locally recognized agencies or professional organizations. Topics addressed include: spill prevention and response, good housekeeping, equipment and material management practices, and erosion/sediment control. The training program will be evaluated by communicating with employees on a regular basis for feedback. Records of all training sessions will be maintained on-site.

9.8 INSPECTIONS

The purpose of the site inspection will be to provide a basis for evaluating the overall effectiveness of the SWPPP and to implement repairs or design changes as soon as feasible depending on field conditions. The main objective of the inspection shall be to allow for the verification of potential pollutant sources; that the site maps, as provided in Section 3.0 of the SWPPP, are accurate and reflect no significant changes, and that controls identified throughout the SWPPP to reduce pollutants in stormwater discharges are accurately identified, in-place and functional. The second objective of the inspection shall be to identify where new drainage control features are needed so that they may be constructed and incorporated into the SWPPP.

Inspections will be performed before and after storm events and once each 24-hour period during extended storm events. Additional site inspections will be conducted,

if deemed necessary. The inspection will be conducted as directed by the Site Manager and/or their designated alternates. For each inspection required above, an inspection checklist will be completed and shall include the following, at a minimum:

- Date of inspection, inspector's name, title and signature.
- Weather information.
- Description of any inadequate BMPs.
- List observations of all BMPs, if site conditions allow.
- Corrective actions required, including any changes to SWPPP and implementation dates.

The following steps will be taken during the annual inspection:

1. Review the SWPPP content prior to the field review and make a list of those activities and features which are covered by the plan.
2. Review facility operations for the past year to determine if any more landfill areas should be added to the original site plan, or if any existing landfill areas were significantly modified to require a site plan modification.
3. Use the inspection to determine if all stormwater pollution prevention measures and erosion control measures are accurately identified in the plan, and are in place and working properly.
4. Document the findings.

Following these inspections, the SWPPP will be revised, as necessary, to reflect the new findings.

RECORDKEEPING AND REPORTING PROCEDURES FOR INSPECTIONS AND MAINTENANCE ACTIVITIES

The maintenance of records for all inspections is an important element of the SWPPP. The documentation of all inspections, whether routine or detailed, is a good preventive maintenance technique, because the analysis of inspection records allows for early detection of any potential problems. One or more of the following tools to document inspections shall be used:

- Inspection checklist forms
- Drawings and maps

- Photographs
- Videotapes

Records are kept to document spills, leaks, and other discharges, including any discharges of hazardous substances in reportable quantities. All records will be retained for a period of at least five years from the date of the report.

10.0 NON-STORMWATER DISCHARGE

The NPDES requires facilities to eliminate or reduce to the extent possible all non-stormwater discharges to stormwater conveyance systems prior to the implementation of a SWPPP. In the future, based on both visual observation and a review of facility records, there will be a determination regarding illicit connections or non-stormwater discharges at the facility. However, should the dry season inspections indicate otherwise, the appropriate actions will be taken.

11.0 CONSTRUCTION RELATED ACTIVITIES

11.1 CONSTRUCTION ACTIVITIES

The following subsections list the methods proposed to mitigate any possible pollutant discharges into the stormwater during landfill construction.

WASTE CONTAINMENT SYSTEM CONSTRUCTION

Upon completion of the excavation operations associated within the initial area of Phase I, construction activities will begin on the waste containment system. No contaminants are anticipated to be associated with this construction. However, some heavy equipment will be utilized during construction. Maintenance procedures will be implemented as previously discussed.

11.2 POST-CONSTRUCTION STORMWATER MANAGEMENT

Prior to the landfill being filled to capacity, a Final Closure Plan will be developed which will incorporate all necessary stormwater and erosion control practices to reduce or eliminate the discharge of sediment from the site after closure. The plan will be developed and implemented in accordance with 27 CCR. The plan will address the operation and maintenance of all stormwater and erosion control practices after completion of construction including funding sources over the post-closure maintenance period of 30-years.

11.3 WASTE MANAGEMENT AND DISPOSAL

All wastes not accepted at the site will be directed off-site in compliance with Federal, State, and local laws, regulations, and ordinances.

11.4 MAINTENANCE, INSPECTION, AND REPAIR

Any maintenance, inspection, and repair activities required because of construction activities will be carried out in accordance with typical good operating/construction project practices

11.5 TRAINING

Refer to Section 9.7 for information regarding employee training.

11.6 LIST OF CONTRACTORS/SUBCONTRACTORS

In addition to GCL personnel assigned to the facility, daily operations will be handled by Herzog Contracting Corporation (Herzog) or equivalently qualified firm. The address for Herzog is 1833 Oceanside Boulevard, Oceanside, California 92054 and the telephone number is (760) 966-0600.

12.0 ADDITIONAL INFORMATION

12.1 NOTICE OF INTENT

A Notice of Intent (NOI) for General Permit to Discharge Storm Water Associated with Construction Activity was submitted to the SWRCB in April 1999. A NOI for Industrial Activity will be submitted to the SWRCB once WDRs for the site have been issued by the RWQCB. Proof of submitting the Construction NOI is included in Appendix B of this document.